



Design name: Terminal Assembly

Abstract:

This design, terminal assembly, combines one S and one video terminals, containing a socket and an adaptor in one structure. The socket offers at least six inlets, four of which are compatible with the standard 4-pin S terminal with respect to pin definition and position of mechanism. The adaptor offers one S and one video terminals which are interconnected with a cable. When the adaptor is plugged into the socket it is connected via the video terminal to an electronic device with only one video terminal. And when the 4-pin S terminal is plugged into the socket it is connected to an electronic device with only one 4-pin S terminal.

Design description:

This design, terminal assembly, combines one S and one video terminals which allows connection to an electronic device with an S or a video terminal.

PCs always offer video and audio outputs to meet requirements of multimedia processing, some of which are integrated on interface cards, and others on motherboards. As IC technology develops, ICs offer more powerful performance in smaller chips so that more ICs, such as networking, modem, graphic processing and surround chips, can be integrated on the motherboards. It is, however, a challenge to integrate these devices on the motherboards without increasing their sizes. For this reason, some PC manufacturers add A/V terminals on their motherboards which allow only connections to electronic devices with A/V terminals, while others integrate only standard 4-pin S terminals so that adaptors are needed to connect such terminals to electronic devices with only A/V terminals. APIPA 8820536 covers such an S terminal adaptor for DVD player. It can eliminate the problem, but it is big in size and complicated. It is not user-friendly.

This design is to offer a combination of one S and one video terminals which enables customer to link his/her PC to an electronic device with either S or A/V terminal.

This design, an assembly, combines one S and one video terminals, containing a socket and an adaptor in one structure. The socket offers at least six inlets, four of which are compatible with the standard 4-pin S terminal with respect to pin definition and position of mechanism. The adaptor offers one S and one video terminals which are interconnected with a cable. When the adaptor is plugged into the socket it is connected via the video terminal to an electronic device with only one video terminal. And when the 4-pin S terminal is plugged into the socket it is connected to an electronic device with only one 4-pin S terminal.

To let you, examining commissioners, understand architecture, features and purpose of this design, the preferred embodiment will now be described with reference to two figures as follows.

Description of the Preferred Embodiment:

The preferred embodiment of the S terminal of this design is shown in Fig. 1. The S terminal socket (1) contains a base (11) and two inlets (12 and 13).

The base (11) offers the socket (1) a fixture, and shields external electromagnetic interference. Four inlets (12), compatible with the standard 4-pin S terminal, allow connection via a pin plug (not drawn) to another electronic device with only one S terminal. Terminals (13), the feature of this design, including one earth and one video output, allow customer to connect his/her PC to an electronic device with only one A/V terminal through the socket (1).

The preferred embodiment of the adaptor of this design is illustrated in Fig. 2. The adaptor (2) consists of one S terminal (21), one cable (22), and one video terminal (23).

The S terminal (21) and the video terminal (23) are interconnected with the cable (22). The S terminal (21) is compatible with the socket (1) with respect to number of pins. When it is plugged into the socket (1) it couples the earth (1) and the A/V output to the video terminal which can be plugged into an electronic device.

For instance, when you want to connect the socket (1) of this design to a video device with only one S terminal (not drawn), you need only plug the S terminal into the socket (1) to couple video signals processed by the surround chip on the motherboard (not drawn) to the device.

When you want to connect the socket (1) of this design to an electronic device with only one A/V terminal, you need only plug the video terminal (23) of the adaptor (2) into the socket (1) to couple the video signals processed by the surround chip on the motherboard (not drawn) to the device.

In a word, this design, combining one S and one video terminals, has the following advantages over the prior art: (1) only one S terminal is integrated on the motherboard which saves space; (2) use of the adaptor allows PC to be connected with an electronic device with only one S or one video terminal; and (3) the adaptor is easy to use.

The preferred embodiment for this design is described hereinabove but not limited to this. Any modification derived from this design by those who are familiar to it will be subject to the scope of the claims hereinafter.

Illustration:

Fig. 1: A preferred embodiment of the S terminal used in this design.

Fig. 2: A preferred embodiment of the adaptor used in this design.

Caption:

socket 1 base 11 inlet 12 and 13